



Built On What Matters

Advanced Meter Fact Sheet

Meters provide an important business link between our distribution systems and our customers.

Frederick Power & Light was created many years ago to plan, build and deliver a reliable supply of electricity to homes and businesses throughout our growing community. Long-term investments in generating stations and transmission and distribution systems ensured a stable supply of electricity for generations of Frederick residents. Over the years, we have regularly upgraded these systems with new wires, substations and more.

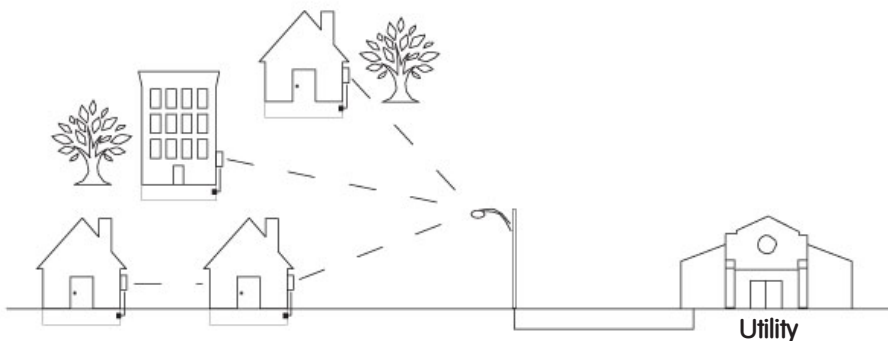
Although we seldom consider the role of the thousands of meters that measure the quantity of electricity used in our homes and businesses, this simple equipment provides an important link between our distribution systems and our customers, and enables billing for monthly services. Many of our existing meters use a mechanism that has not changed much in decades. These meters provide a one-way flow of information, from the customer to the utility, that is very basic and not timely - reporting usage from the past month.

New meter technology is changing this link by allowing for more timely transfer of electricity use information to our distribution and billing systems. In the future, new meters also can be used to transfer information to customers through internet connections and other types of home networks. Electric crews will benefit from more information about outages, improving safety and helping ensure reliability. Customers may choose to better manage their electric use and in many cases to keep their costs as low as possible.

How it Works

New meters in homes and businesses communicate encrypted consumption data to centralized communication devices. New devices, installed on substations and utility poles, create a network, connecting the meters and billing systems. This system is described as a communication mesh network. The data, which includes only a meter number, its operational status, and consumption data, is transferred to a new information system for validation and billing. Once completed, the new network may also be used by customers for more timely information on their electric use.

Communication Mesh Network



Advanced meters will use information and technology to maintain high system reliability, provide more timely customer service and prepare Frederick Power & Light and the community for emerging technologies.

